

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

REMARKS/ARGUMENTS

This amendment is submitted in response to the Office Action of August 6, 2004, where the Examiner has rejected claims 2-13, 18, and 36-38 under 35 U.S.C. 103(a).

Claims 37 and 38 were previously canceled in Applicant's Amendment dated March 31, 2004 in reply to the Examiner's Office Action of March 2, 2004; however, claims 37 and 38 are represented for cancellation herein. Claims 2-13, 18 and 36 are pending in the application. The Examiner's grounds for rejection are hereinafter traversed, and reconsideration is respectfully requested on the following reasons.

Reconsideration is requested of the rejection of claims 2-13, 18, and 36 under 35 U.S.C. 103(a) as allegedly being unpatentable over Thomason (U.S. Patent 6,317,039) in view of Jordan et al (U.S. Patent 6,249,241 B1). Claims 37 and 38 are canceled.

Applicant respectfully recalls the Examiner's attention to the problem solved by Applicant's invention. The problem is to provide a common communications connection to a number of diverse communications systems commonly found aboard U.S. Navy ships. When a ship is offshore, a common communications control station is interfaced with all of the shipboard communications. When the ship is docked, the common communications station allows interface with multiple ships. The need for common communications arises because of the coordination and oversight required during tactical exercises. As is well known in the art, Navy ships are designed to be deployed under battlefield conditions, and numerous diverse technologies are employed within the ship communications environment for redundancy in the event of damage to any one system. In addition, having many communications circuits permits clusters of specialized communications: For example, the propulsion division will communicate over a specific circuit, while the weapons division will communicate over another independent circuit. As is well known in the art, sound powered phones require no electricity: initial contact is made by selecting a station to be called and cranking a handle to activate a remote signal. Some communication circuits are powered by direct current. Some circuits are powered by alternating current. Some circuits include radio communications. And, some circuits include a PBX. Therefore, the scenario control requires the ability to communicate with personnel on all of these communication systems while maintaining isolation among the communication systems at the audio interface.

Specifically, the Examiner stated, "Regarding to claims 2, 9, 11, 18 and 36 Thomason discloses an audio communication control system useful in training operations on tactical systems communication equipment, the audio communication control system (Fig. 1) comprising communications equipment 102-105 operable from a plurality of remote locations 101 for communication with a centralized control center 108 (Fig. 1 col. 2 lines 65-67 and col. 3 lines 1-6), the communications equipment including a plurality of audio communications systems (Fig. 2 col. 3 lines 44-47), wherein at least one of the plurality of audio communications audio equipment and signal processing 103 (Fig. 2 col.

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

3 lines 48-61); a tactical training system (col. 2 lines 4-18) operable with the central control center for interfacing with tactical training equipment 102-136 distributed through the plurality of remote locations, the tactical training equipment providing a communications connection to a wide area network WAN 107 for communicating with other remote locations communication equipment (Fig. 3 col. 5 lines 39-43); a single headset 111 having left/right speaker 135 and a microphone 134 for providing an operator with voice transmission (Fig. 3 col. 5 lines 35-38); an audio interface 110 for operating between the tactical training system and the headset to provide an electrical connection to the communications equipment therewith (Fig. 3 col. 5 lines 48-57), the audio interface switching discrete audio communications signals therefrom and routing the audio signals to one of the left speaker, the right speaker, and the microphone of the headset (Fig. 3 col. 5 lines 58-61); and an operator control interface 109 operable with the audio interface for controlling the routing and switching of the audio signals (Fig. 3 col. 6 lines 1-10), the operator control interface including an interactive graphical display for selection of the communication equipment to be operable with the single headset (Fig. 3 col. 5 lines 61-67)."

Thomason by itself or in the combination of Thomason over Jordan, will not result in the Applicant's invention. In considering the admissibility of a reference as evidence, "it is Hornbook law [that] prior art is only of value for what it actually shows..." Hall Laboratories, Inc. v. National Aluminate Corp., 101 USPQ 4, 10 (D.Del. 1954); In re Stempel, 113 USPQ 77, 81 (CCPA 1957).

The Applicant's invention is different from the primary reference, Thomason. Thomason discloses a system comprising a wireless network and/or the Internet to exchange audio (and video) information between one or more remote field technicians and a centralized expert located at The Local Station (Fig. 1 col 5 line 32). Furthermore, Thomason also discloses that communication may be from the centralized expert to multiple technicians (col 2 lines 1-3). Thomason does not teach communication with different species of communications equipment being defined by an architecture that preexists or interacts with Thomason's network or Internet means: Applicant emphasizes that the system disclosed by Thomason does not integrate preexisting independent communications systems (as would be found aboard a ship) into the communications stream. This is an essential difference that distinguishes the Applicant's invention from Thomason: Thomason discloses two-way communication between a remote location and a local station via one network or the Internet. In the Applicant's invention, the ship communications equipment provides communications to various stations for the ship. These preexisting stations utilize many diverse technologies, such as sound powered wired lines and internal PBX lines, in order to provide redundancy for reliability in a battle or casualty situation. The problem that the Applicant solves is to provide a tactical training system that interfaces with all of the preexisting communications systems. Therefore, the Applicant provides a system that is expandable to communicate with shipboard systems aboard as many ships as are required to be involved in a training scenario.

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

Moreover, Thomason only discloses one remote location in Thomason's configuration (Fig. 3 col 1 lines 49-56, 58-60 col 2 lines 18-29 col 3 lines 22-28) while the Applicant's invention provides for communications with multiple remote locations. The user interface 40 remains consistent across all ship platforms. (Specification page 7 lines 20-21).

The differences between Thomason's disclosure and Applicant's invention are shown by the relationship of a cell phone in Thomason's invention. Regarding The Local Station (Fig. 3 col 5 lines 31-44), Thomason utilizes a wireless network and provides access to the network through either of a wireless portable processor or the Internet (Col 5 lines 44-47). Thomason uses the cell phone in two applications: First, Thomason uses the cell phone for access to the network by the local station (Col 5 lines 26-28). Second, Thomason teaches that communication between the remote station and the Local Station also may be through cell phone to cell phone (col. 8 lines 65-68). The need to communicate with equipment outside of the communication station headphone and microphone is precisely the problem overcome by the Applicant's invention. Specifically, the use of cell phone to cell phone communication (or any secondary communications channel) teaches away from the Applicant's invention because the user would have to adjust or remove the head phones to use the cell phone.

With reference to claims 2, 11 and 18 the limitations of Thomason cited by the Examiner do not correspond to the elements in Applicant's claim and, furthermore, the Examiner cites corresponding elements that are not present in Thomason. Applicant respectfully calls the Examiner's attention to the "communications equipment 102-105" cited by the Examiner. This communications equipment is shown in Thomason (Fig. 1) to be a wireless remote system that is an integral portion of Thomason's wireless network whereas the "ship communications equipment" refers to the communications systems aboard a ship (Specification page 6, lines 18-21). The communications systems aboard Naval ships represent a diversity of communications systems that are incompatible with each other and with the prior art central scenario control station. The Applicant's concept is to conceive a central communications station that communicates with all of these incompatible communications systems aboard numerous ships. Applicant states, "As a result, the system 10, not only acts as a communications integrator, but also has the ability to route audio from one tactical communications systems equipment 14 to either a wide area network (WAN) 50, or to another tactical system onboard ship." (Specification page 8 lines 5-8) To overcome the problem of integrating incompatible discrete communications systems, the Applicant's invention is expandable and reconfigurable to adjust to the tactical training scenario. The Examiner also finds correspondence between Applicant's "tactical training system" element and Thomason's description of "a tactical training system (col. 2 lines 4-18)." However, here Thomason is referring to application of his invention to different user backgrounds (col. 2 lines 4-18) (i.e. how to use the invention) and not to an element of the invention. Therefore, the Examiner is reading into Thomason an element that is not present in the primary reference (or secondary reference).

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

The Examiner notes that "Thomason fails to teach the communication equipments is onboard a ship consisting of a radio telephone system (claims 2 and 18), a time encoder operable with global position system for time stamping of audio packets transmitted across the WAN (claim 9); and the graphical display of the operator control interface comprises scenario control buttons for selection of a desired virtual frequency channel of the WAN for input to one of the left speaker and the right speaker (claims 11 and 36)." The Examiner explains that Jordan discloses a Vessel Traffic System VTS with communications equipment onboard a ship (Fig. 1 col 5 lines 21-32) consisting of a radio telephone system 26 (Fig. 2B col 7 lines 19-25), a time encoder operable with a global positioning system for time stamping of audio packets transmitted across the WAN (Fig. 15 col. 16 lines 49-60) and a graphical display for the operator to select a desired virtual frequency channel of the WAN for input to one of the left speaker and the right speaker (Col 15 lines 14-10)."

As pointed out by the Applicant, with respect to claims 2, 11 and 18, even if Jordan were combined with Thomason, the Applicant's invention would not result because a "radio telephone system" is only one species of communications equipment. As explained above, the element "ship communications equipment" does not have the same meaning as used in the primary reference and therefore, there is no motivation to use Jordan as a secondary reference.

Claim 9, which depends from claims 8 and 2, also incorporates the limitations of claim 2. Claim 9, which depends from claim 2, should be patentable for depending from what should now be an allowable independent claim.

Claim 36 is a method claim and does not depend upon structure. Nowhere within the references cited by the Examiner is the method of Claim 36 anticipated, suggested or enabled. Among the steps taught in claim 36 are three distinguishable steps: "operating the graphical user interface for connection to a first discrete audio communications system and routing a first discrete audio signal to one of the left speaker and the right speaker of the single headset"; operating the graphical user interface for connection to a second discrete audio communications system and routing a second discrete audio signal to another of the left speaker and the right speaker of the single headset; and, "operating the graphical user interface for connection of the microphone of the headset to a third discrete audio communications system." The Examiner's citation in Jordan provides only, "The operator will also have the capability to assign specific channels for monitoring via control speakers and headset. Each defined audio channel has a visual indicator of channel activity." (col. 15 lines 14-19) Jordan fails to provide how this is accomplished and is therefore, not enabling even if Jordan could be combined with Thomason. However, Jordan cannot be combined with Thomason because Thomason does not disclose more than one "discrete audio communications system," as that element is defined in the Applicant's invention. Under Applicant's definition of "discrete audio communications system" Thomason would only encompass the network or the Internet (col 5 lines 14-21). This being the case, there is no motivation in Thomason to rely on Jordan as a reference. And, if Jordan could be combined with Thomason the claimed invention would still not be taught. Thomason is concerned with oversight of field

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

personnel using mentors who are in communication with the field personnel. As such there is only one audio communications path in use over the network or Internet at any time (unless cell phone to cell phone communication is used – which use teaches away from Applicant's invention.)

With reference to claim 3, the Examiner asserts, "Thomason discloses the tactical training system comprises a battle force tactical trainer 109 (Fig. 1 col. 3 lines 11-14)." Applicant respectfully draws the Examiner's attention that Examiner appears to be relying solely on the primary reference, Thomason, and therefore appears to be asserting an anticipation rejection under 35 U.S.C. 102(a). Applicant respectfully disagrees, that under either 35 U.S.C. 102(a) or 35 U.S.C. 103(a), that Thomason discloses a Battle Force Tactical Trainer. Thomason teaches, "The local master technician 109 may view and hear the same stimuli at the remote site as the mobile field technician 102 by means of audio and video sensors at the remote site." (Col. 3 lines 11-14). With reference to Applicant's specification for definition of "Battle Force Tactical Trainer" as used in claim 3, "The Battle Force Tactical Trainer (BFTT) provides the U.S. Navy with onboard training for many different functions performed on a ship...Using the BFTT, voice communications between ships within the tactical training scenario have been historically handled by a BFTT Digital Voice system (BDV) ...This type of communication is referred to as scenario control (SC) and is used for coordination of the training exercise by an operator." (Specification page 1). Thomason does not teach, nor suggest scenario control for training of a battle force: The definition of BFTT is different, as disclosed by Applicant's express definition, by function and by use from the concept disclosed by Thomason. Thomason is not suited for such use because Thomason does not provide the capability to communicate among a plurality of diverse shipboard communications systems as shipboard communications are defined by Applicant (as explained above): Thomason is limited to communications within a predefined environment consisting of a network or the Internet. Similarly, the BFTT provides audio sensors but not video sensors. Therefore, the Examiner's conclusion that Thomason teaches a BFTT is traversed and should be reconsidered. Claim 3 which depends from claim 2 should be patentable both for the above reason and furthermore because claim 3 depends from what should now be an allowable independent claim.

The Examiner states that claim 4 depends from claim 1. In Applicants Amendment dated March 31, 2004, Applicant deleted claim 1, amended claim 2, and further amended claim 4 to depend from amended claim 2. Claim 4, which depends from claim 2, also incorporates the limitations of claim 2. Claim 4, which depends from claim 2, should be patentable for depending from what should now be an allowable independent claim.

Claims 5, 6, 7, 8, 10, 13 which depend from claim 2, should be patentable for depending from what should now be an allowable independent claim.


Claim 12, which includes all of the limitations of claim 2, should be patentable for the reasons pertaining to claim 2 that have been explained by Applicant.

Appl. No. 09/450,640
Amdt. dtd. October 14, 2004
Reply to Office action of August 6, 2004

Applicant respectfully requests reconsideration and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Date: October 14, 2004


Eliot Abolafia
Registration # 43,456
Department of the Navy
Office of Counsel, NTSD Orlando
12350 Research Parkway
Orlando, FL 32826-3275
Deflorez Building, RM 2162, Code 11.3